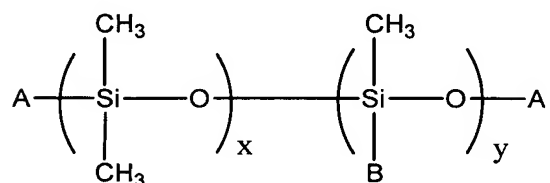


CLAIMS

5 1. A print medium comprising an ink-receiving layer and a coated paperbase, the ink-receiving layer comprising a nonionic siloxane copolymer surfactant.

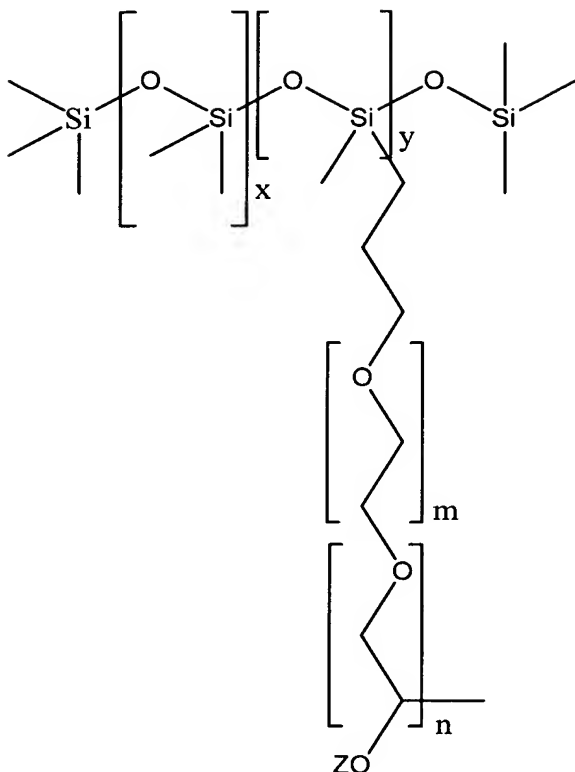
10 2. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises the following structure:



wherein A is $-\text{CH}_3$ or B, and B is a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

15

3. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises the following structure:



wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H, $-\text{CH}_3$, or a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

4. The print medium of claim 1, wherein the surface tension of the nonionic siloxane copolymer surfactant is from about 20 dyne/cm to about 35 dyne/cm.

5. The print medium of claim 1, wherein the hydrophilic/hydrophobic balance value (HLB) of the nonionic siloxane copolymer surfactant is from about 10 to about 30.

6. The print medium of claim 1, wherein the weight percent (wt %) of the nonionic siloxane copolymer surfactant is from about 0.05 wt % to about 2 wt %.

7. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant has a molecular weight of greater than about 1000.

8. The print medium of claim 1, wherein the ink-receiving layer further comprises a nonionic or anionic surfactant, wherein the nonionic or anionic surfactant is present in a concentration that is less than the concentration of the nonionic siloxane copolymer surfactant present in the ink-receiving layer.

9. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.

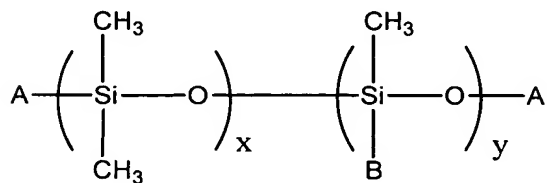
10. The print medium of claim 1, wherein the coated paperbase comprises a coated paper, a cast-coated paper, or a commercial offset paper.

11. A method of forming a print medium having improved image quality and permanence, comprising:

providing a coated paperbase; and

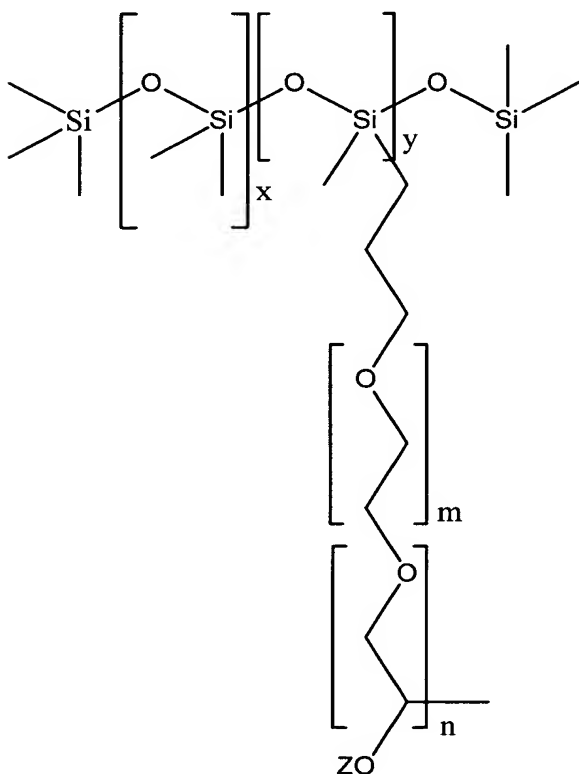
applying an ink-receiving layer to the coated paperbase, the ink-receiving layer comprising a nonionic siloxane copolymer surfactant.

12. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a surfactant having the following structure:



wherein A is $-\text{CH}_3$ or B, and B is a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

- 5 13. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a surfactant having the following structure:



- 10 wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H, $-\text{CH}_3$, or a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

- 15 14. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a nonionic siloxane copolymer surfactant having a molecular weight of greater than about 1000.

15. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a nonionic siloxane copolymer surfactant having at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.

5

16. A method of printing an image having improved image quality and permanence, comprising:

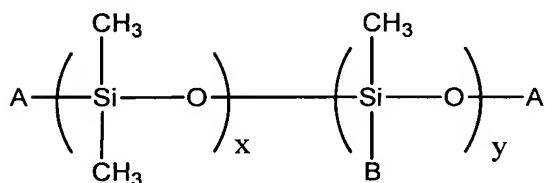
providing a print medium comprising a coated paperbase and an ink-receiving layer present on the coated paperbase, the ink-receiving layer

10 comprising a nonionic siloxane copolymer surfactant; and

printing the image on the print medium.

17. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a surfactant with the following structure:

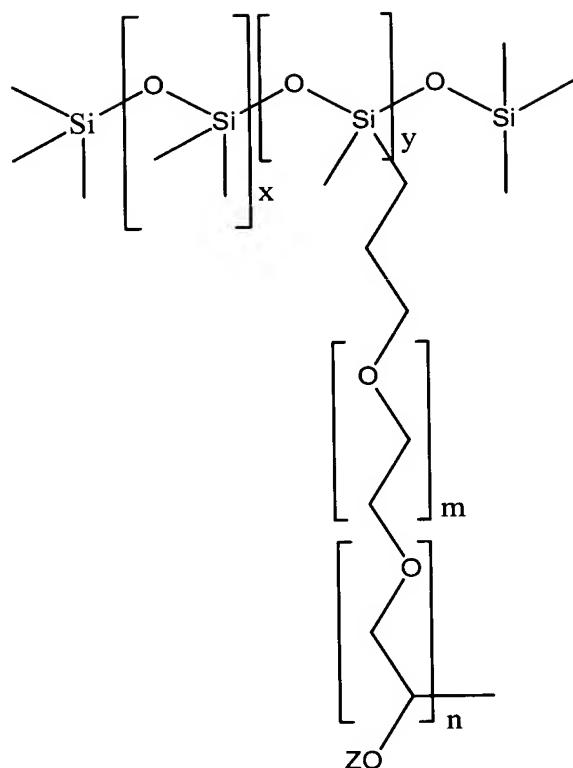
15



wherein A is $-\text{CH}_3$ or B, and B is a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

20

18. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a surfactant with the following structure:



wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H, $-\text{CH}_3$, or a C_1 to C_{10} straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

10

19. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a nonionic siloxane copolymer surfactant with a molecular weight of greater than about 1000.

15

20. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.